

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020283**Date Inspected:** 13-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Yu Dong Ping, Qiu Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/TOWER**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 11, WEST TOWER LIFT 5, GRILLAGE PLATE (NWIT # 06938)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

WSD1-TL5-4B/F-003 (Class "A" rejectable indication found during inspection)

WSD1-TL5-4B/F-004

BAY 11, OBG BIKE PATH (NWIT # 06936, GREEN TAG NO. 14341)

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15%, Ultrasonic Testing (UT) of approximately 10% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT and UT reports for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

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BK004A3-017-002, 010

BK004A5-017-002, 008

This Quality Assurance (QA) Inspector observed the following work in progress:

BAY 11, OBG BIKE PATH

During random in process inspection of Orthotropic Box Girder (OBG) member identified as end plate of bike path this QA observed an arc strike on Piece Mark (PCMK) identified as BK004A-020. This QA marked the affected area and informed ZPMC Quality Control (QC) identified as Mr. Shao Hai Lang of this issue. Mr. Shao Hai Lang informed this QA that the arc strike would be corrected in a manner compliant with the contract documents.

FCAW welding of weld joint 072 & 073 located on BK004A6-021.

Welder is identified as 042218. ZPMC QC is identified as mr. Wang Chuan Xin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

FCAW welding of weld joints 001 & 165 located on BK004A6-017.

Welder is identified as 049220. ZPMC QC is identified as Mr. Shao Hai Lang.

The welding variables recorded by QC appeared to comply with WPS-B-T-2333-Tc-P4-F.

FCAW welding of weld joint 007 located on BK004A6-017.

Welder is identified as 049220. ZPMC QC is identified as Mr. Shao Hai Lang.

The welding variables recorded by QC appeared to comply with WPS-B-T-2332-Tc-P4-F.

BAY # 10

FCAW welding of weld joints 014 & 015 located on BK004A4-033.

Welders are identified as 057180 & 052075. ZPMC QC is identified as Mr. Li Peng Fei.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

FCAW welding of weld joints 025 & 026 located on BK004A7-033.

Welders are identified as 057258 & 053869. ZPMC QC is identified as Mr. Li Peng Fei.

The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

During the Quality Assurance Ultrasonic Testing (UT) verification of welds located on grillage plate of West Tower lift 5, this Quality Assurance (QA) Inspector discovered the following issues:

- One class "A" longitudinal indication measuring approximately 50mm in length.
- The depth of the indication is 57mm.
- The db rating is -2.
- The material thickness is 65mm.
- The weld is identified as: WSD1-TL5-4B/F-003.
- The Weld is a Complete Joint Penetration (CJP) with steel backing, T-joint, joining the grillage plate to the skin

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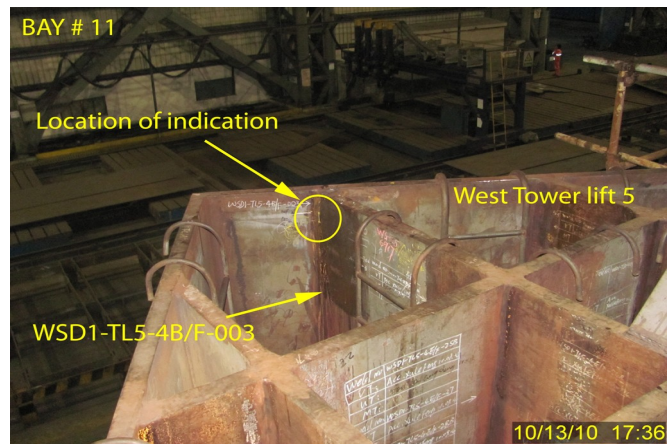
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plate (skin "D").

- The "Y" location of the indication is 110mm from top side
- The indication is clearly marked on the component.
- The member is located in Bay 10.
- Attached photographs provide additional location details.

The Notice of Witness Inspection Number (NWIT) is 06938. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% UT inspection of this weld. This issue has an incident report.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer